

In the Claims:

Please amend claims 1, 3, 8 and 9 and add new claims 12 - 22, all as shown below.

1. (Currently Amended): A method for automatically generating program code, comprising:
determining whether a resource is available; and
generating program code when the resource is determined to be available, wherein
generating program code includes:
 - creating a class file container object;
 - adding a method to the class file object;
 - adding code to the method;
 - generating Java byte code for the class file container object; and
 - generate an instance of the new class file object.
2. (Original): The method of claim 1 wherein creating a class file container object includes:
setting attributes for a class file.
3. (Currently Amended): The method of claim 2 the attributes include at least one of class file
name, parent super class.
4. (Original): The method of claim 1 wherein adding a method to the class file object
includes:
adding a plurality of methods to the class file object.

5. (Original): The method of claim 1 wherein adding code to the method includes adding code to the method using constructs that correspond to programming language statements, expressions, and variables.
6. (Original): The method of claim 5 wherein the constructs include parameters.
7. (Original): The method of claim 5 wherein each statement, expression type, variable is represented as an object.
8. (Currently Amended): The method of claim 1 wherein generating Java byte code for the class file container object includes:
generating an intermediate representation of program flow.
9. (Currently Amended): The method of claim 8 wherein generating Java byte code for the class file container object includes:
converting the intermediate representation into byte code.
10. (Original): The method of claim 1 wherein the program code implements an adaptor class.
11. (Original): The method of claim 1 wherein the program code implements a proxy class.
12. (New): The method of claim 1 further comprising:
repeatedly adding a method to the class file object for each method associated with a stub

generated for a remote object.

13. (New): The method of claim 12 wherein repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object includes:
determining a number of methods associated with the stub in a remote interface.
14. (New): The method of claim 12 wherein adding code to the method includes:
repeatedly adding code for each method added to the class file.
15. (New): The method of claim 1 wherein at least one of adding a method to the class file and adding code to the method includes:
generating a tree of statements.
16. (New): The method of claim 15 wherein generating a tree of statements includes:
generating a tree representing at least one method, the at least one method comprising at least one of: a code statement, an expression, a variable and a programming construct.
17. (New): The method of claim 15 wherein generating a tree of statements includes:
generating a tree forming a known structure when the class file container is a known type.
18. (New): The method of claim 17 wherein generating a tree forming a known structure when the class file container is a known type includes:
generating a tree forming a known structure when the class file container is of at least one of

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an adapter and a proxy type.

19. (New): The method of claim 1 wherein generating byte code for the class file container object includes:

maintaining a state of a program being generated by each statement.

20. (New): The method of claim 19 wherein maintaining a state of a program being generated by each statement includes:

maintaining at least one of a content of a stack, a content of a variable in use during program flow.

21. (New): The method of claim 20 further comprising: generating an intermediate representation of program flow based upon the at least one of a content of a stack, a content of a variable in use during program flow.

22. (New): The method of claim 1 wherein determining whether a resource is available includes:

determining whether a remote object having an interface to which code is being written is available.